

m. B Tung

1644

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/077,606

DATE: 05/26/1999  
TIME: 14:36:26

Input Set: I077606.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

ENTERED

```
1 <110> APPLICANT: JIANG, Pan Hong
2 KABA, Aboubacar
3 CHANY-FOURNIER, Francoise
4 CERUTTI, Italina
5 CHANY, Charles
6 <120> TITLE OF INVENTION: COMPOUNDS HAVING LECTINIC PROPERTIES AND THEIR
7 BIOLOGICAL APPLICATIONS
8 <130> FILE REFERENCE: 040388/0113
9 <140> CURRENT APPLICATION NUMBER: US/09/077,606
10 <141> CURRENT FILING DATE: 1998-07-30
11 <150> EARLIER APPLICATION NUMBER: WO PCT/FR96/01937
12 <151> EARLIER FILING DATE: 1996-12-04
13 <160> NUMBER OF SEQ ID NOS: 6
14 <170> SOFTWARE: PatentIn Ver. 2.0
15 <210> SEQ ID NO 1
16 <211> LENGTH: 1831
17 <212> TYPE: DNA
18 <213> ORGANISM: Homo sapiens
19 <220> FEATURE:
20 <221> NAME/KEY: CDS
21 <222> LOCATION: (62)..(1468)
22 <400> SEQUENCE: 1
23 gaattccggc gactgcgcgc tcctcctcgc ccgccgctag gtccatcccg gccagccac 60
24 c atg tcc atc cac ttc agc tcc ccg gta ttc acc tcg cgc tca gcc gcc 109
25 Met Ser Ile His Phe Ser Ser Pro Val Phe Thr Ser Arg Ser Ala Ala
26 1 5 10 15
27 ttc tcg ggc cgc ggc gcc cag gtg cgc ctg agc tcc gct cgc ccc ggc 157
28 Phe Ser Gly Arg Gly Ala Gln Val Arg Leu Ser Ser Ala Arg Pro Gly
29 20 25 30
30 ggc ctt ggc agc agc agc ctc tac ggc ctc ggc gcc tcg cgg ccg cgc 205
31 Gly Leu Gly Ser Ser Ser Leu Tyr Gly Leu Gly Ala Ser Arg Pro Arg
32 35 40 45
33 gtg gcc gtg cgc tct gcc tat ggg ggc ccg gtg ggc gcc ggc atc cgc 253
34 Val Ala Val Arg Ser Ala Tyr Gly Gly Pro Val Gly Ala Gly Ile Arg
35 50 55 60
36 gag gtc acc att aac cag agc ctg ctg gcc ccg ctg cgg ctg ggc gcc 301
37 Glu Val Thr Ile Asn Gln Ser Leu Leu Ala Pro Leu Arg Leu Gly Ala
38 65 70 75 80
39 gac ccc ttc tcc cag cgg gtg cgc cag gag gag agc gag cag atc aag 349
40 Asp Pro Phe Ser Gln Arg Val Arg Gln Glu Glu Ser Glu Gln Ile Lys
41 85 90 95
42 acc ctc aac aac aag ttt gcc tcc ttc atc gac aag gtg cgg ttt ctg 397
43 Thr Leu Asn Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu
44 100 105 110
```

PAGE: 2

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/077,606

DATE: 05/26/1999  
TIME: 14:36:26

Input Set: I077606.RAW

45	gag cag cag aac aag ctg ctg gag acc aag tgg acg ctg ctg cag gag	445
46	Glu Gln Gln Asn Lys Leu Leu Glu Thr Lys Trp Thr Leu Leu Gln Glu	
47	115 120 125	
48	cag aag tcg gcc aag agc agc cgc ctc cca gac atc ttt gag gcc cag	493
49	Gln Lys Ser Ala Lys Ser Ser Arg Leu Pro Asp Ile Phe Glu Ala Gln	
50	130 135 140	
51	att gct ggc ctt cgg ggt cag ctt gag gca atg cag gtg gat ggg ggc	541
52	Ile Ala Gly Leu Arg Gly Gln Leu Glu Ala Met Gln Val Asp Gly Gly	
53	145 150 155 160	
54	cgc ctg gag cag ggg ctg cgg acg atg cag gat gtg gtg gag gac ttc	589
55	Arg Leu Glu Gln Gly Leu Arg Thr Met Gln Asp Val Val Glu Asp Phe	
56	165 170 175	
57	aag aat aag tac gaa gat gaa att aac cgc cgc aca gct gct gag aat	637
58	Lys Asn Lys Tyr Glu Asp Glu Ile Asn Arg Arg Thr Ala Ala Glu Asn	
59	180 185 190	
60	gag ttt gtg gtc ctg aag aag gat gtg gat gct gcc tac atg agc aag	685
61	Glu Phe Val Val Leu Lys Lys Asp Val Asp Ala Ala Tyr Met Ser Lys	
62	195 200 205	
63	gtg gag ctg gag gcc aag gtg gat gcc ctg aat gat gag atc aac ttc	733
64	Val Glu Leu Glu Ala Lys Val Asp Ala Leu Asn Asp Glu Ile Asn Phe	
65	210 215 220	
66	ctc agg acc ctc aat gag acg gag ttg aca gag ctt cag tcc cag atc	781
67	Leu Arg Thr Leu Asn Glu Thr Glu Leu Thr Glu Leu Gln Ser Gln Ile	
68	225 230 235 240	
69	tcc gac aca tct gtg gtg ctg tcc atg gac aac agt cgc tcc ctg gac	829
70	Ser Asp Thr Ser Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp	
71	245 250 255	
72	ctg gac ggc atc atc gct gag gtc aag gcg cag tat gag gag atg gcc	877
73	Leu Asp Gly Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Glu Met Ala	
74	260 265 270	
75	aaa tgc agc cgg gct gag gct gaa gcc tgg tac cag acc aag ttt gag	925
76	Lys Cys Ser Arg Ala Glu Ala Glu Ala Trp Tyr Gln Thr Lys Phe Glu	
77	275 280 285	
78	acc ctc cag gcc cag gct ggg aag cat ggg gac gac ctc cgg aat acc	973
79	Thr Leu Gln Ala Gln Ala Gly Lys His Gly Asp Asp Leu Arg Asn Thr	
80	290 295 300	
81	cgg aat gag att tca gag atg aac cgg gcc atc cag agg ctg cag gct	1021
82	Arg Asn Glu Ile Ser Glu Met Asn Arg Ala Ile Gln Arg Leu Gln Ala	
83	305 310 315 320	
84	gag atc gac aac atc aag aac cag cgt gcc aag ttg gag gcc gcc att	1069
85	Glu Ile Asp Asn Ile Lys Asn Gln Arg Ala Lys Leu Glu Ala Ala Ile	
86	325 330 335	
87	gcc gag gct gag gag cgt ggg gag ctg gcg ctc aag gat gct cgt gcc	1117
88	Ala Glu Ala Glu Glu Arg Gly Glu Leu Ala Leu Lys Asp Ala Arg Ala	
89	340 345 350	
90	aag cag gag gag ctt gaa gcc gcc ctg cag cgg gcc aag cag gat atg	1165
91	Lys Gln Glu Glu Leu Glu Ala Ala Leu Gln Arg Ala Lys Gln Asp Met	
92	355 360 365	
93	gca cgg cag ctg cgt gag tac cag gaa ctc atg agc gtg aag ctg gcc	1213
94	Ala Arg Gln Leu Arg Glu Tyr Gln Glu Leu Met Ser Val Lys Leu Ala	

PAGE: 3

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/077,606

DATE: 05/26/1999  
TIME: 14:36:26

Input Set: I077606.RAW

```

95          370          375          380
96      ctg gac atc gag atc gcc acc tac cgc aag ctg ctg gag ggc gag gag      1261
97      Leu Asp Ile Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu
98      385          390          395          400
99      agc cgg ttg gct gga gat gga gtg gga gcc gcc aat atc tct gtg atg      1309
100     Ser Arg Leu Ala Gly Asp Gly Val Gly Ala Ala Asn Ile Ser Val Met
101          405          410          415
102     aat tcc act ggt ggc agc agc agt ggc ggt ggc att ggg ctg acc ctc      1357
103     Asn Ser Thr Gly Gly Ser Ser Ser Gly Gly Gly Ile Gly Leu Thr Leu
104          420          425          430
105     ggg gga acc atg ggc agc aat gcc ctg agc ttc tcc agc agt gcg ggt      1405
106     Gly Gly Thr Met Gly Ser Asn Ala Leu Ser Phe Ser Ser Ser Ala Gly
107          435          440          445
108     cct ggg ctc ctg aag gct tat tcc atc cgg acc gca tcc gcc agt cgc      1453
109     Pro Gly Leu Leu Lys Ala Tyr Ser Ile Arg Thr Ala Ser Ala Ser Arg
110          450          455          460
111     agg agt acc cgc gac tgagtcgcct cccaccactc cactcctcca gccaccaccc      1508
112     Arg Ser Thr Arg Asp
113     465
114     acaatcacag ccattgccga ggctgaggag tgtggggagc tggcgctcaa ggatgctcgt      1568
115     gccaagcagg aggagctgga agccgccctg cagcgggcca agcaggatat ggcacggcag      1628
116     ctgctgtgagt accaggaact catgagcgtg aagctggccc tggacatcga gatcgccacc      1688
117     taccgcaagc tgctggaggg cgaggagagc cggttggctg gagatggagt gggagccgtg      1748
118     aatatctctg tgatgaattc cactggtggc agtagcagtg gcggtggcat tgggctagcc      1808
119     ctcgggggaa ccatgggcag caa      1831
120 <210> SEQ ID NO 2
121 <211> LENGTH: 405
122 <212> TYPE: DNA
123 <213> ORGANISM: Homo sapiens
124 <220> FEATURE:
125 <221> NAME/KEY: CDS
126 <222> LOCATION: (1)..(405)
127 <400> SEQUENCE: 2
128     atg tcc atc cac ttc agc tcc ccg gta ttc acc tcg cgc tca gcc gcc      48
129     Met Ser Ile His Phe Ser Ser Pro Val Phe Thr Ser Arg Ser Ala Ala
130     1          5          10          15
131     ttc tcg ggc cgc ggc gcc cag gtg cgc ctg agc tcc gct cgc ccc ggc      96
132     Phe Ser Gly Arg Gly Ala Gln Val Arg Leu Ser Ser Ala Arg Pro Gly
133     20          25          30
134     ggc ctt ggc agc agc agc ctc tac ggc ctc ggc gcc tcg cgg ccg cgc      144
135     Gly Leu Gly Ser Ser Ser Leu Tyr Gly Leu Gly Ala Ser Arg Pro Arg
136     35          40          45
137     gtg gcc gtg cgc tct gcc tat ggg ggc ccg gtg ggc gcc ggc atc cgc      192
138     Val Ala Val Arg Ser Ala Tyr Gly Gly Pro Val Gly Ala Gly Ile Arg
139     50          55          60
140     gag gtc acc att aac cag agc ctg ctg gcc ccg ctg cgg ctg ggc gcc      240
141     Glu Val Thr Ile Asn Gln Ser Leu Leu Ala Pro Leu Arg Leu Gly Ala
142     65          70          75          80
143     gac ccc ttc tcc cag cgg gtg cgc cag gag gag agc gag cag atc aag      288
144     Asp Pro Phe Ser Gln Arg Val Arg Gln Glu Glu Ser Glu Gln Ile Lys

```

PAGE: 4

RAW SEQUENCE LISTING  
 PATENT APPLICATION US/09/077,606

DATE: 05/26/1999  
 TIME: 14:36:26

Input Set: I077606.RAW

```

145          85          90          95
146  acc ctc aac aac aag ttt gcc tcc ttc atc gac aag gtg cgg ttt ctg 336
147  Thr Leu Asn Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu
148          100          105          110
149  gag cag cag aac aag ctg ctg gag acc aag tgg acg ctg ctg cag gag 384
150  Glu Gln Gln Asn Lys Leu Leu Glu Thr Lys Trp Thr Leu Leu Gln Glu
151          115          120          125
152  cag aag tcg gcc aag agc agc 405
153  Gln Lys Ser Ala Lys Ser Ser
154          130          135
155 <210> SEQ ID NO 3
156 <211> LENGTH: 469
157 <212> TYPE: PRT
158 <213> ORGANISM: Homo sapiens
159 <400> SEQUENCE: 3
160  Met Ser Ile His Phe Ser Ser Pro Val Phe Thr Ser Arg Ser Ala Ala
161      1          5          10          15
162  Phe Ser Gly Arg Gly Ala Gln Val Arg Leu Ser Ser Ala Arg Pro Gly
163          20          25          30
164  Gly Leu Gly Ser Ser Ser Leu Tyr Gly Leu Gly Ala Ser Arg Pro Arg
165          35          40          45
166  Val Ala Val Arg Ser Ala Tyr Gly Gly Pro Val Gly Ala Gly Ile Arg
167          50          55          60
168  Glu Val Thr Ile Asn Gln Ser Leu Leu Ala Pro Leu Arg Leu Gly Ala
169          65          70          75          80
170  Asp Pro Phe Ser Gln Arg Val Arg Gln Glu Glu Ser Glu Gln Ile Lys
171          85          90          95
172  Thr Leu Asn Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu
173          100          105          110
174  Glu Gln Gln Asn Lys Leu Leu Glu Thr Lys Trp Thr Leu Leu Gln Glu
175          115          120          125
176  Gln Lys Ser Ala Lys Ser Ser Arg Leu Pro Asp Ile Phe Glu Ala Gln
177          130          135          140
178  Ile Ala Gly Leu Arg Gly Gln Leu Glu Ala Met Gln Val Asp Gly Gly
179  145          150          155          160
180  Arg Leu Glu Gln Gly Leu Arg Thr Met Gln Asp Val Val Glu Asp Phe
181          165          170          175
182  Lys Asn Lys Tyr Glu Asp Glu Ile Asn Arg Arg Thr Ala Ala Glu Asn
183          180          185          190
184  Glu Phe Val Val Leu Lys Lys Asp Val Asp Ala Ala Tyr Met Ser Lys
185          195          200          205
186  Val Glu Leu Glu Ala Lys Val Asp Ala Leu Asn Asp Glu Ile Asn Phe
187          210          215          220
188  Leu Arg Thr Leu Asn Glu Thr Glu Leu Thr Glu Leu Gln Ser Gln Ile
189  225          230          235          240
190  Ser Asp Thr Ser Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp
191          245          250          255
192  Leu Asp Gly Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Glu Met Ala
193          260          265          270
194  Lys Cys Ser Arg Ala Glu Ala Glu Ala Trp Tyr Gln Thr Lys Phe Glu

```

PAGE: 5

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/077,606

DATE: 05/26/1999  
TIME: 14:36:26

Input Set: I077606.RAW

```

195          275          280          285
196  Thr Leu Gln Ala Gln Ala Gly Lys His Gly Asp Asp Leu Arg Asn Thr
197          290          295          300
198  Arg Asn Glu Ile Ser Glu Met Asn Arg Ala Ile Gln Arg Leu Gln Ala
199  305          310          315          320
200  Glu Ile Asp Asn Ile Lys Asn Gln Arg Ala Lys Leu Glu Ala Ala Ile
201          325          330          335
202  Ala Glu Ala Glu Glu Arg Gly Glu Leu Ala Leu Lys Asp Ala Arg Ala
203          340          345          350
204  Lys Gln Glu Glu Leu Glu Ala Ala Leu Gln Arg Ala Lys Gln Asp Met
205          355          360          365
206  Ala Arg Gln Leu Arg Glu Tyr Gln Glu Leu Met Ser Val Lys Leu Ala
207  370          375          380
208  Leu Asp Ile Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu
209  385          390          395          400
210  Ser Arg Leu Ala Gly Asp Gly Val Gly Ala Ala Asn Ile Ser Val Met
211          405          410          415
212  Asn Ser Thr Gly Gly Ser Ser Ser Gly Gly Gly Ile Gly Leu Thr Leu
213          420          425          430
214  Gly Gly Thr Met Gly Ser Asn Ala Leu Ser Phe Ser Ser Ser Ala Gly
215          435          440          445
216  Pro Gly Leu Leu Lys Ala Tyr Ser Ile Arg Thr Ala Ser Ala Ser Arg
217  450          455          460
218  Arg Ser Thr Arg Asp
219  465

```

&lt;210&gt; SEQ ID NO 4

&lt;211&gt; LENGTH: 135

&lt;212&gt; TYPE: PRT

&lt;213&gt; ORGANISM: Homo sapiens

&lt;400&gt; SEQUENCE: 4

```

225  Met Ser Ile His Phe Ser Ser Pro Val Phe Thr Ser Arg Ser Ala Ala
226    1          5          10          15
227  Phe Ser Gly Arg Gly Ala Gln Val Arg Leu Ser Ser Ala Arg Pro Gly
228          20          25          30
229  Gly Leu Gly Ser Ser Ser Leu Tyr Gly Leu Gly Ala Ser Arg Pro Arg
230          35          40          45
231  Val Ala Val Arg Ser Ala Tyr Gly Gly Pro Val Gly Ala Gly Ile Arg
232          50          55          60
233  Glu Val Thr Ile Asn Gln Ser Leu Leu Ala Pro Leu Arg Leu Gly Ala
234          65          70          75          80
235  Asp Pro Phe Ser Gln Arg Val Arg Gln Glu Glu Ser Glu Gln Ile Lys
236          85          90          95
237  Thr Leu Asn Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu
238          100          105          110
239  Glu Gln Gln Asn Lys Leu Leu Glu Thr Lys Trp Thr Leu Leu Gln Glu
240          115          120          125
241  Gln Lys Ser Ala Lys Ser Ser
242          130          135

```

&lt;210&gt; SEQ ID NO 5

&lt;211&gt; LENGTH: 15

PAGE: 6

VERIFICATION SUMMARY  
PATENT APPLICATION US/09/077,606

DATE: 05/26/1999  
TIME: 14:36:26

Input Set: I077606.RAW

Line ? Error/Warning

Original Text

-----